

KIC 008124788

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
008124788-01	OBS	No	0.554204	131.737130	0.0	4.553	8.4	0.0	3.12	6401	0.04	58044.67

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008124788-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_FEW_MEAS

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

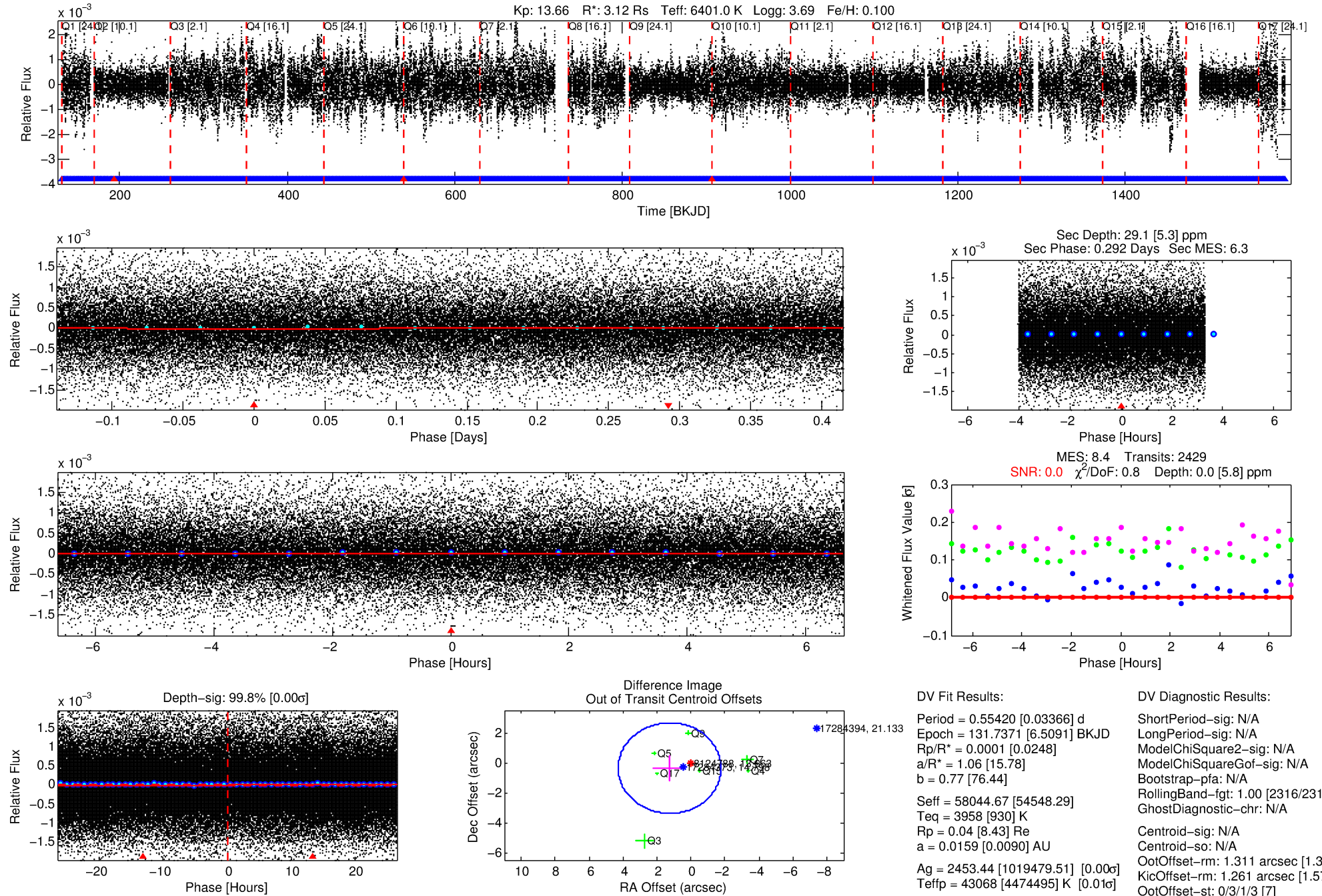
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008124788-01

No Significant Match Found

DV One-Page Summary

KIC: 8124788 Candidate: 1 of 1 Period: 0.554 d



DV Fit Results:

Period = 0.55420 [0.03366] d
Epoch = 131.7371 [6.5091] BKJD
Rp/R* = 0.0001 [0.0248]
a/R* = 1.06 [15.78]
b = 0.77 [76.44]
Seff = 58044.67 [54548.29]
Teff = 3958 [930] K
Rp = 0.04 [8.43] Re
a = 0.0159 [0.0090] AU
Ag = 2453.44 [1019479.51] [0.00 σ]
Teffp = 43068 [4474495] K [0.01 σ]

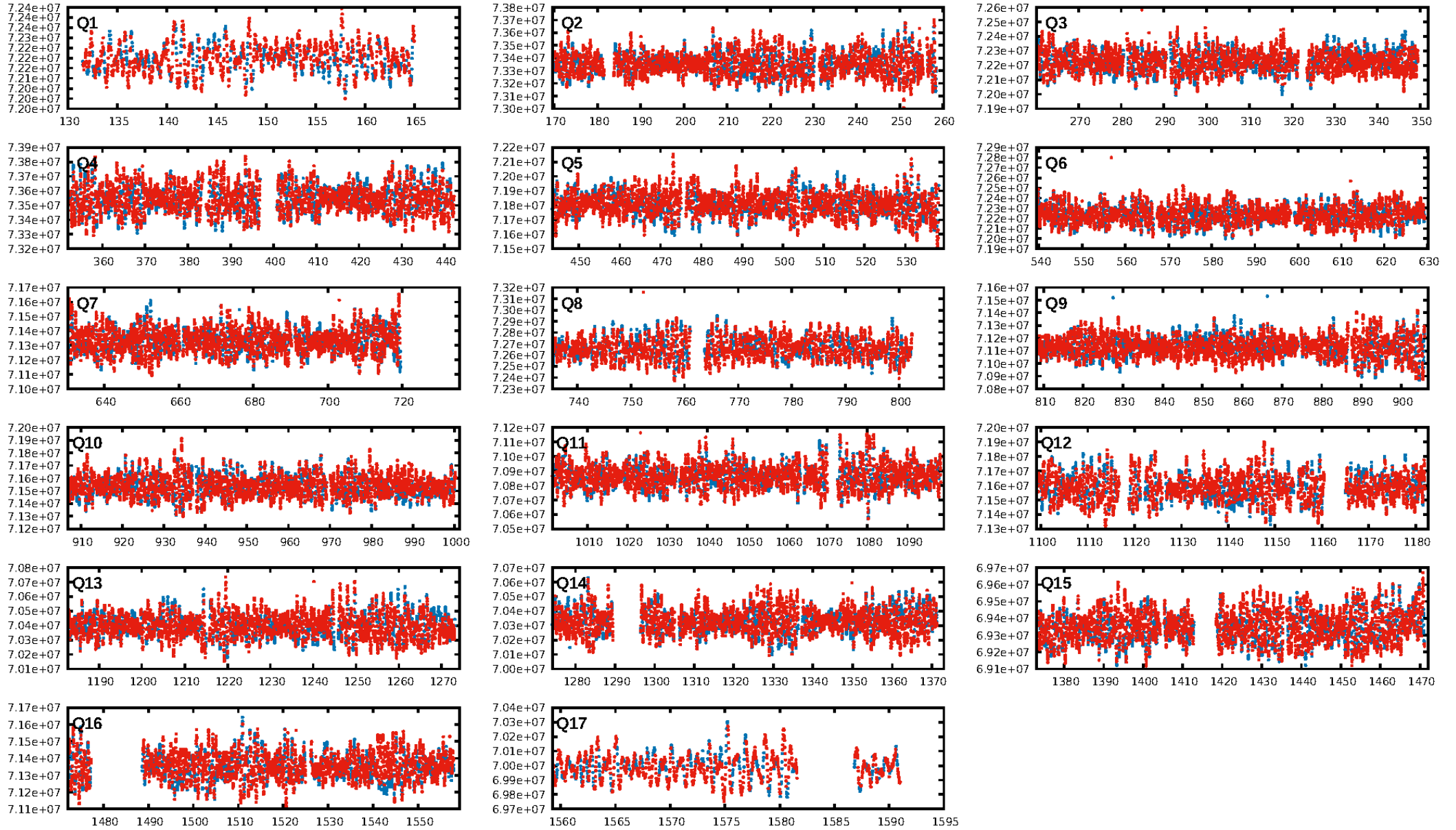
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2316/2319]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 1.311 arcsec [1.30 σ]
KicOffset-rm: 1.261 arcsec [1.57 σ]
OotOffset-st: 0/3/1/3 [7]
KicOffset-st: 0/3/1/3 [7]
DiffImageQuality-fgm: 0.14 [1/7]
DiffImageOverlap-fno: 1.00 [17/17]

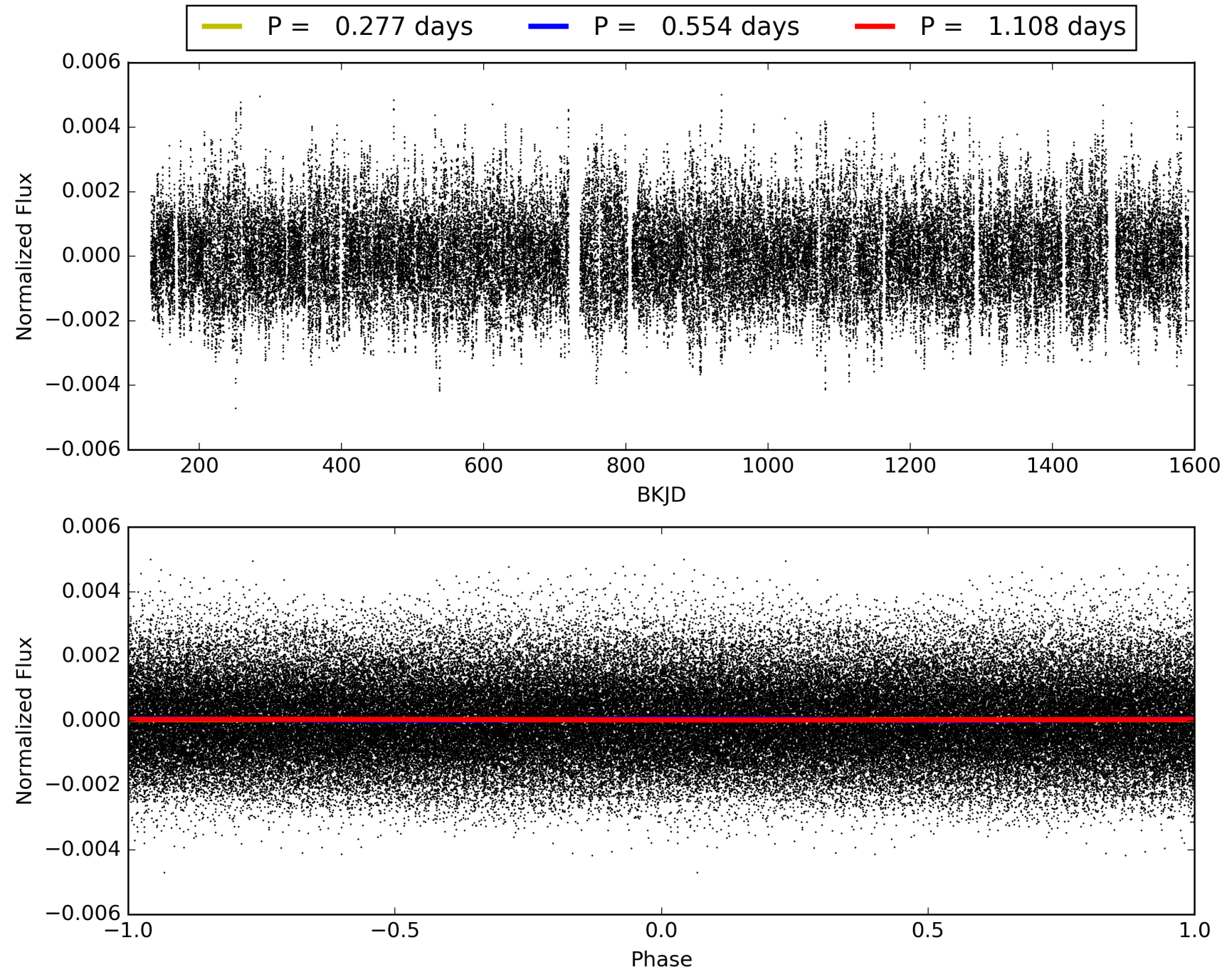
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 18:05:18 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008124788-01, PDC Light Curves

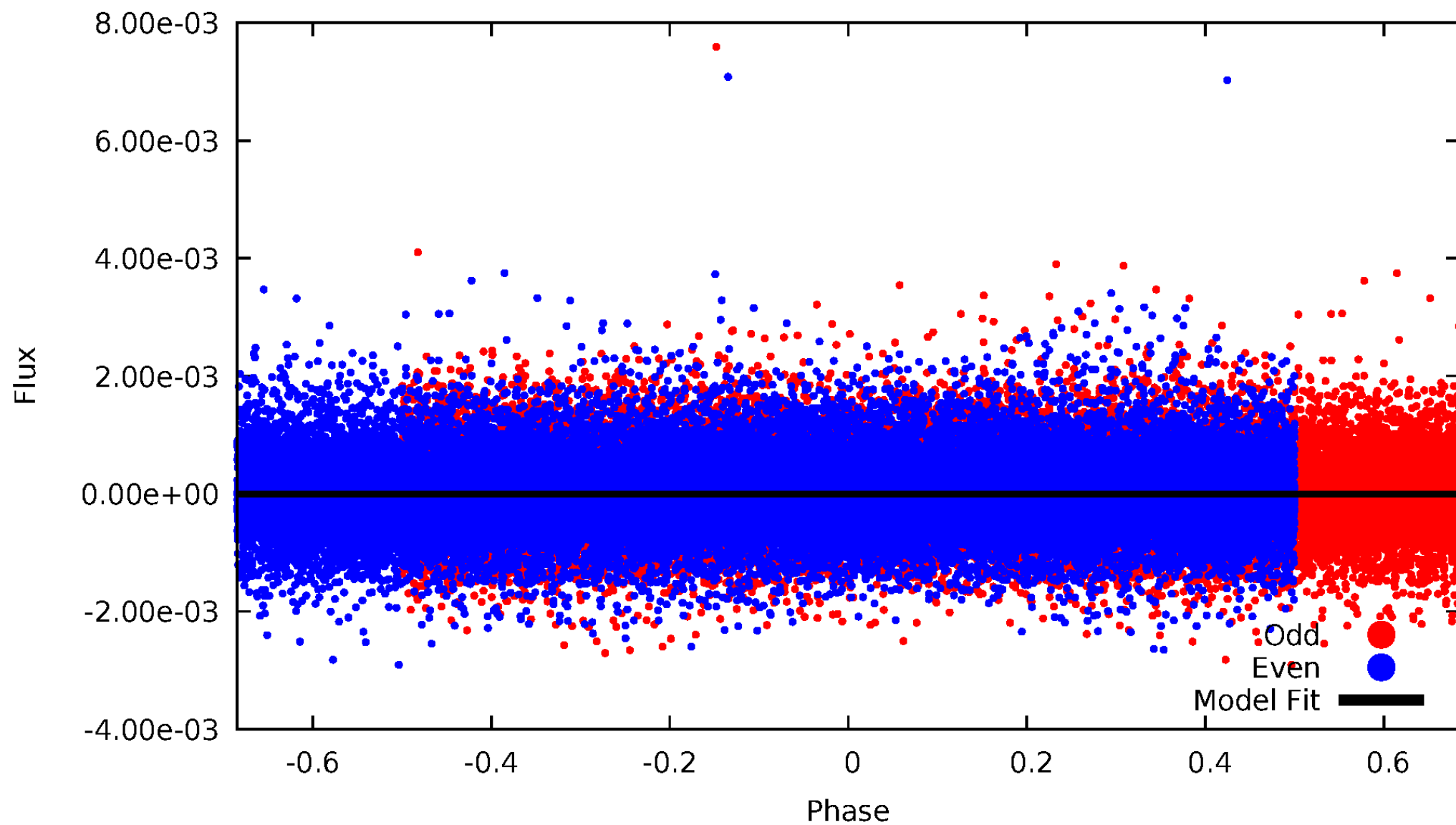


TCE 008124788-01



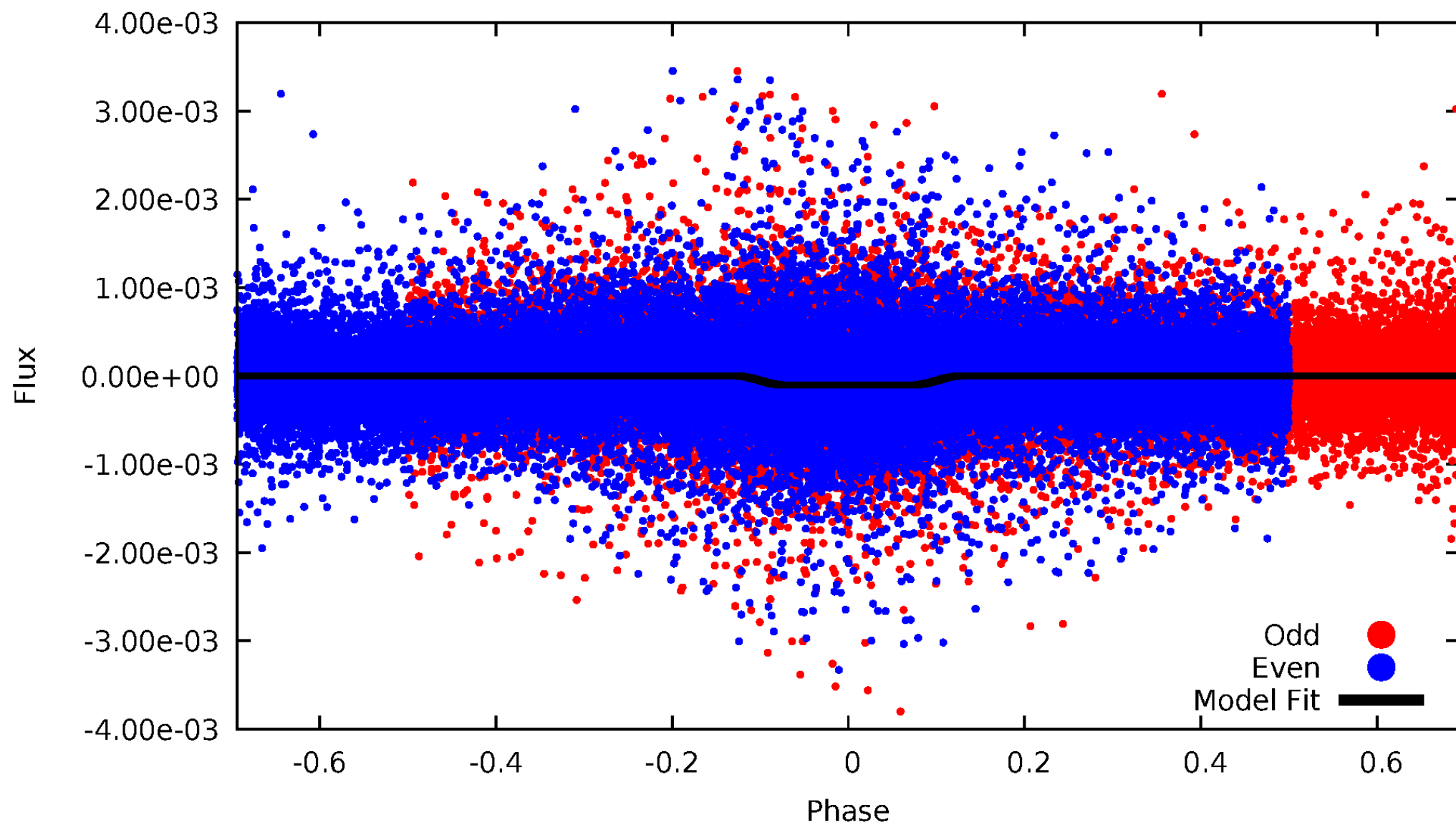
DV Odd/Even

TCE 008124788-01

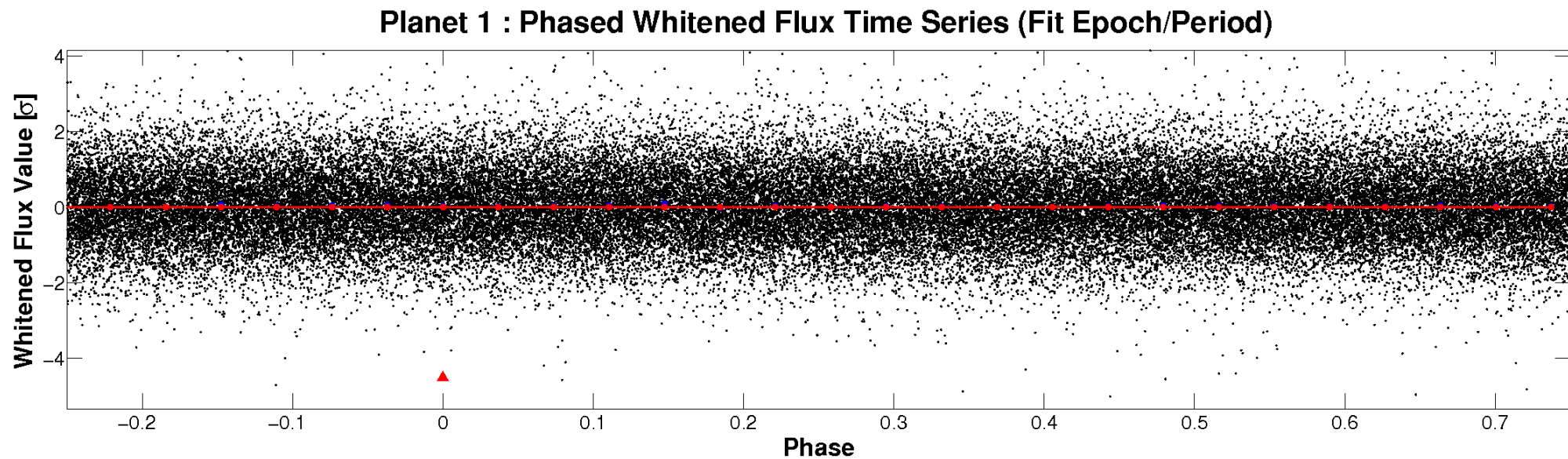
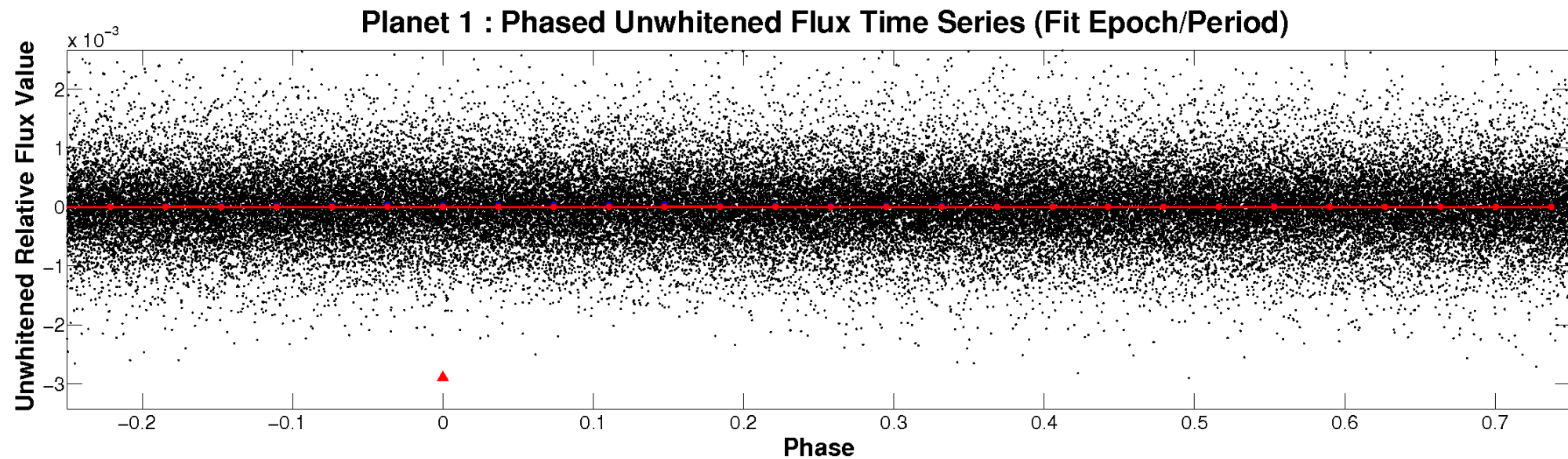


ALT Odd/Even

TCE 008124788-01

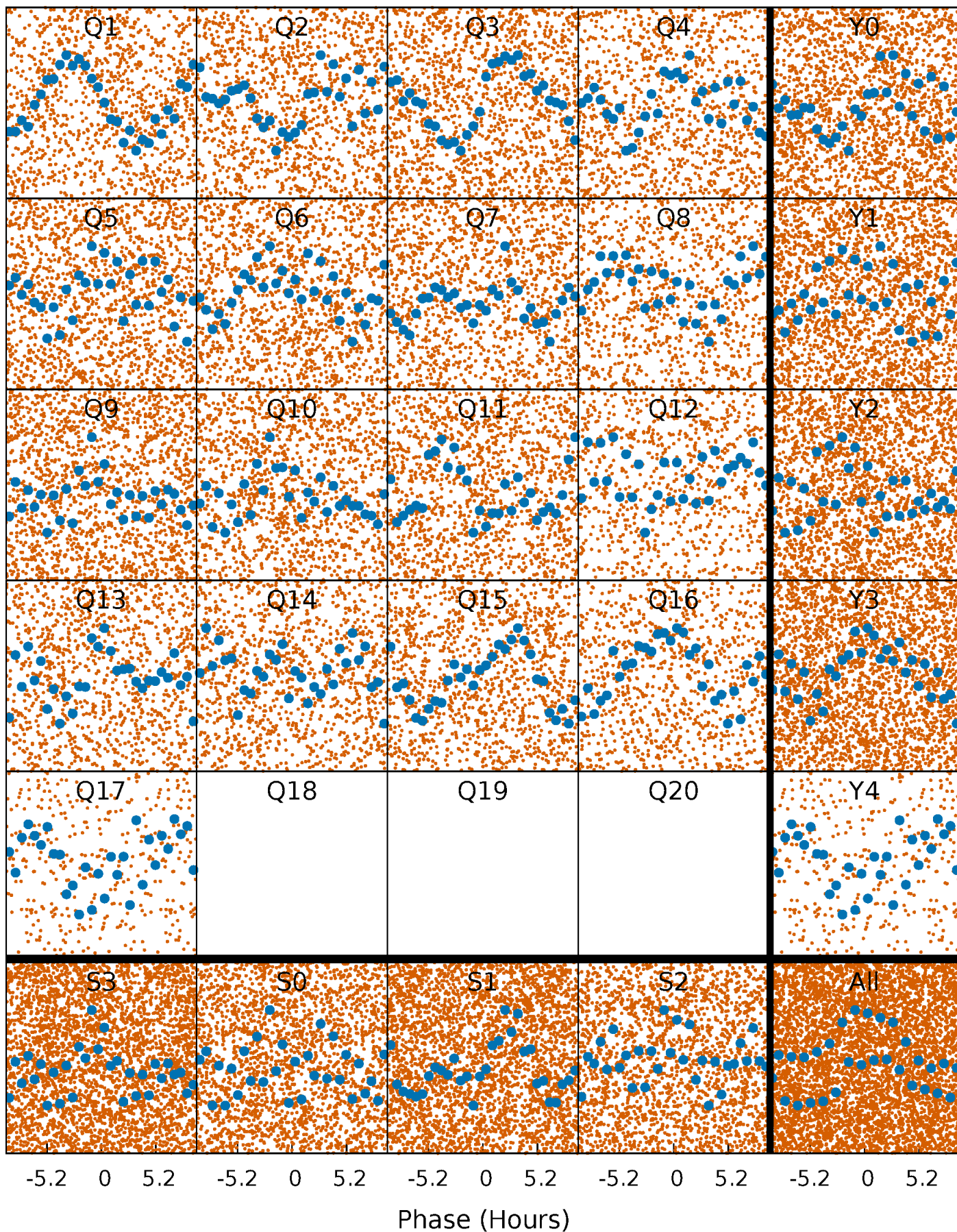


Non-Whitened Vs. Whitened Light Curve



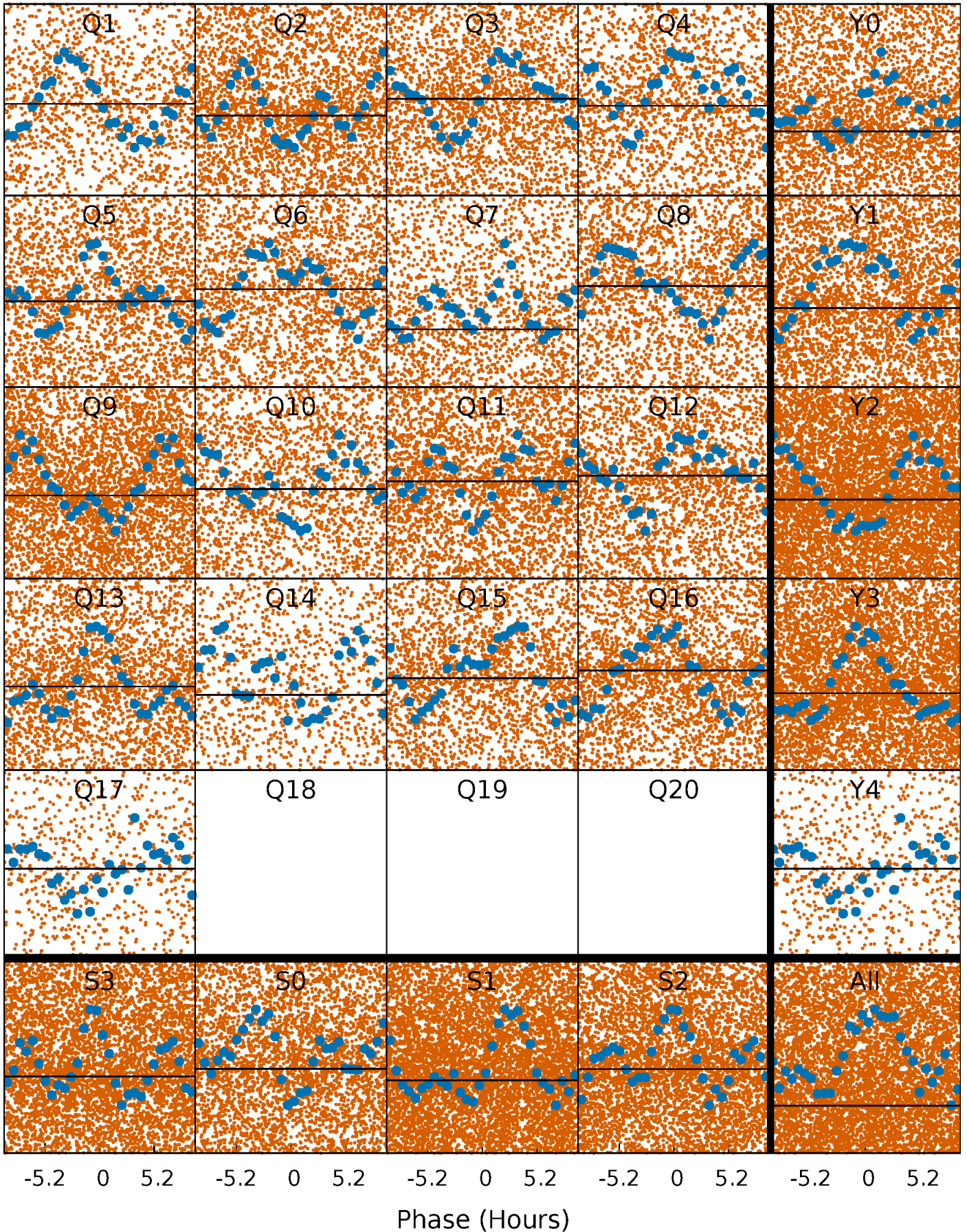
PDC Quarter-Phased Transit Curves

TCE 008124788-01 P= 0.554204 Days $T_0=131.737130$ (BKJD)



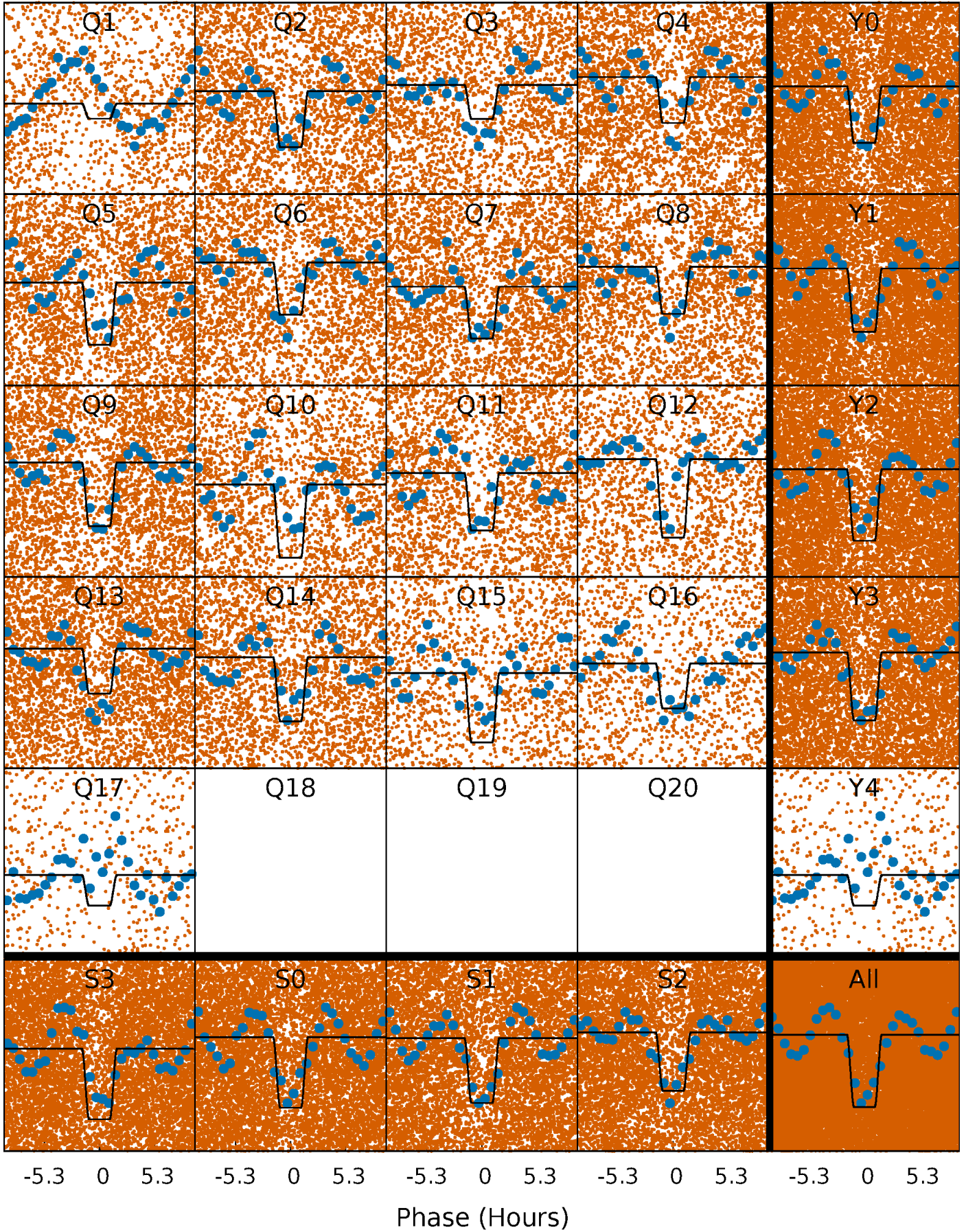
DV Quarter-Phased Transit Curves

TCE 008124788-01 P= 0.554204 Days $T_0=131.737130$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

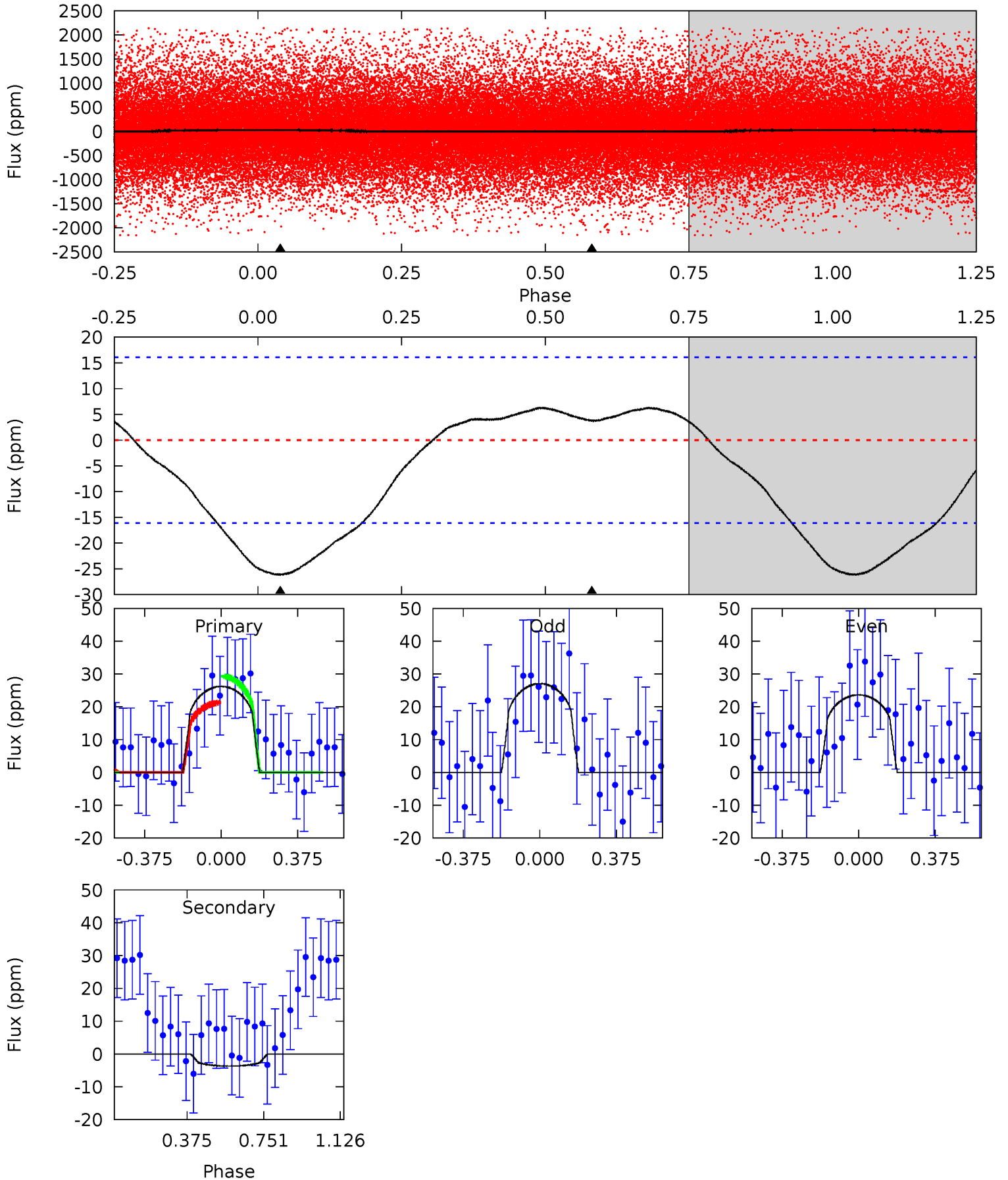
TCE 008124788-01 P= 0.553854 Days $T_0=131.747211$ (BKJD)



DV Model-Shift Uniqueness Test

008124788-01, P = 0.554204 Days, E = 131.182926 Days

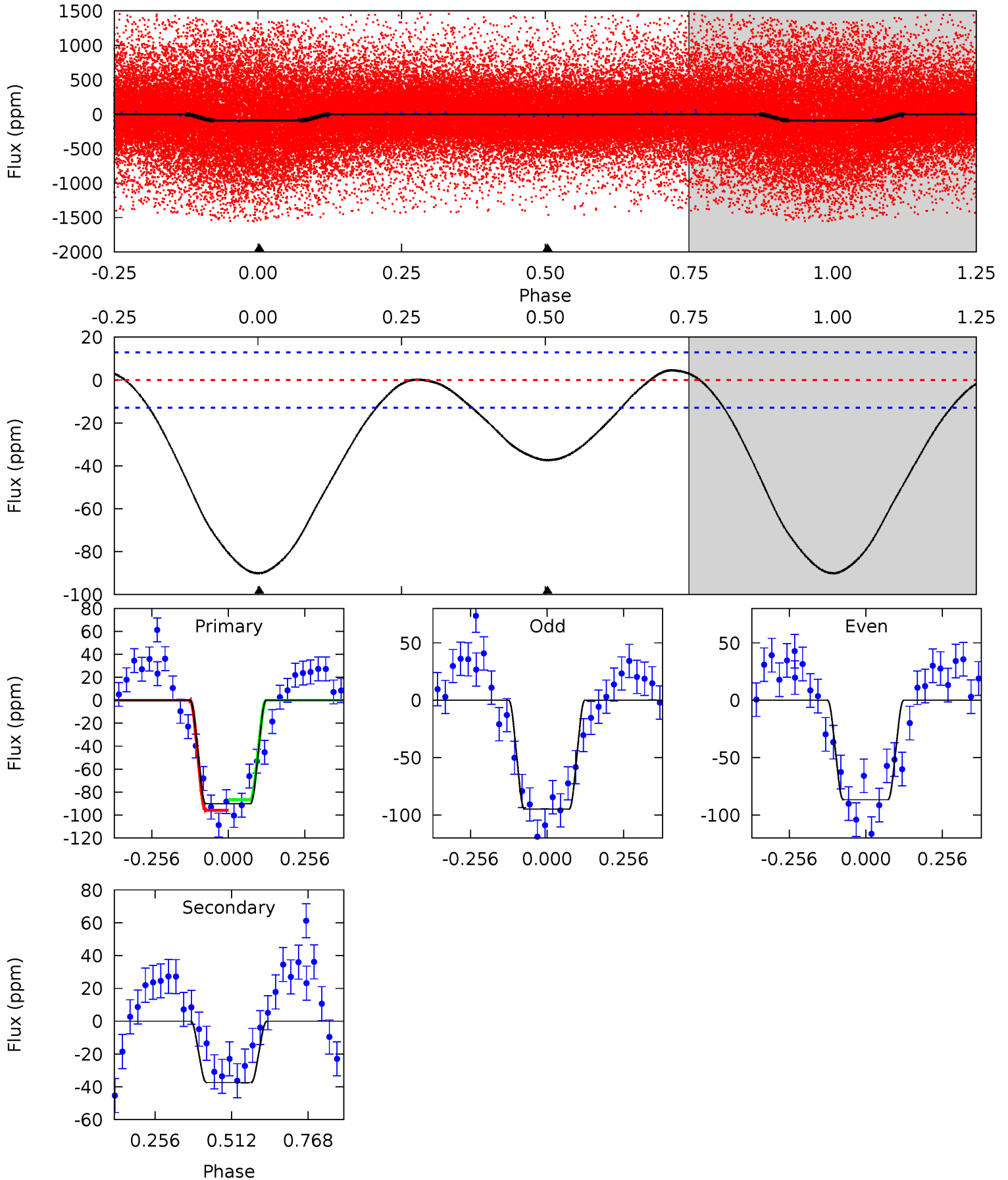
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.97	-0.98	0	0	4.28	0.89	0.66	6.97	6.97	-0.98	-0.98	0.46	2.77	0.20	1.06



Alt Model-Shift Uniqueness Test

008124788-01, P = 0.553854 Days, E = 131.193357 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.6	12.7	0	0	4.36	1.14	0.98	30.6	30.6	12.7	12.7	1.39	0.79	0.05	1.41



Stellar Parameters For KIC 008124788

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6401^{+202}_{-247}	$3.690^{+0.549}_{-0.092}$	$0.100^{+0.250}_{-0.300}$	$3.120^{+0.442}_{-1.767}$	$1.740^{+0.178}_{-0.570}$	$0.081^{+0.498}_{-0.024}$
	+3%/-4%	+15%/-2%	+250%/-300%	+14%/-57%	+10%/-33%	+617%/-29%
Source	PHO1	KIC0	KIC0	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008124788-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	4 ± 4	$5.03^{+5.38}_{-3.62}$	5339^{+398}_{-792}	-4646^{+531}_{-424}	$-0.014^{+0.014}_{-0.173}$
Alt.	-37 ± 3	$6.12^{+6.62}_{-4.34}$	5364^{+431}_{-703}	-3929^{+9819}_{-636}	$0.136^{+1.384}_{-0.106}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

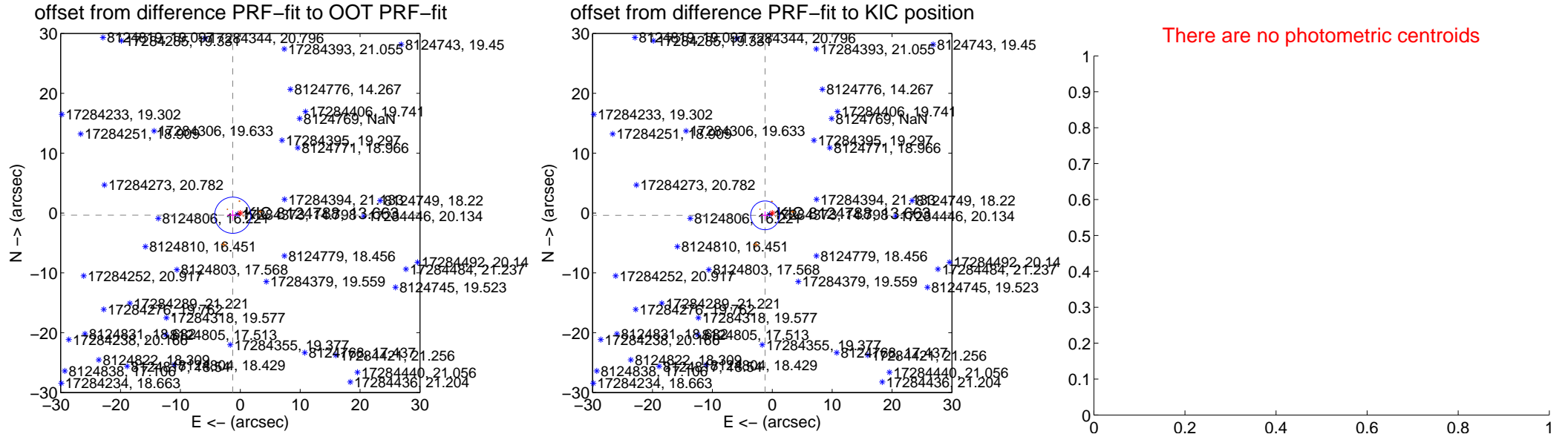
DV Centroid Data

Supplemental centroid analysis for 008124788-01. Kepler magnitude: 13.66. Transit SNR 0.00

There are 1 quarters with good PRF difference image offsets

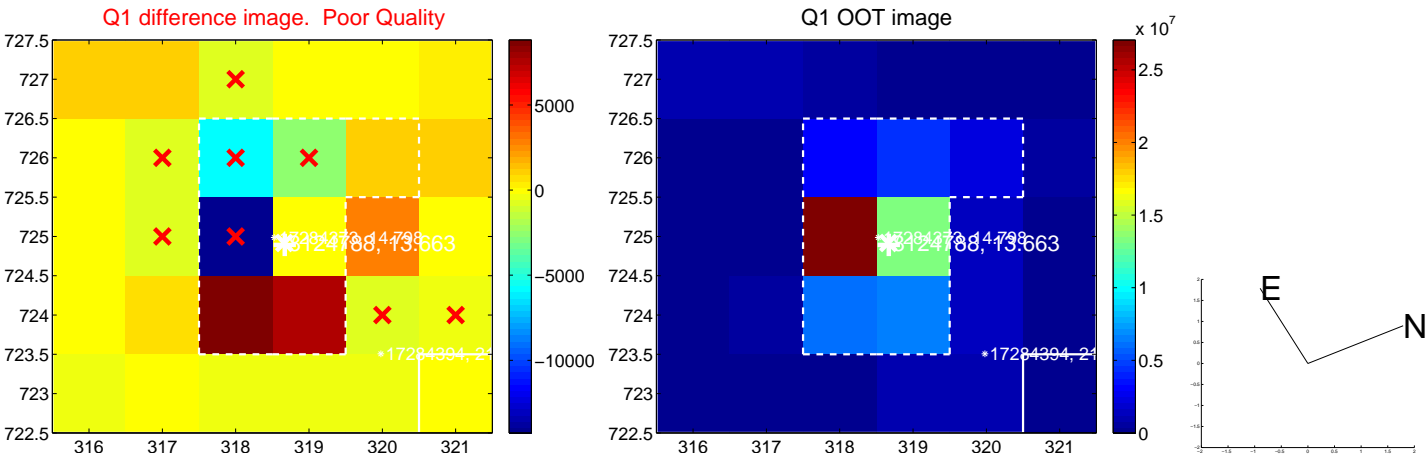
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.311 ± 1.009	1.30	1.259 ± 0.919	-0.368 ± 0.810
PRF-fit source offset from KIC position	1.261 ± 0.801	1.57	1.199 ± 0.723	-0.389 ± 0.669
photometric centroid source offset	—	—	—	—

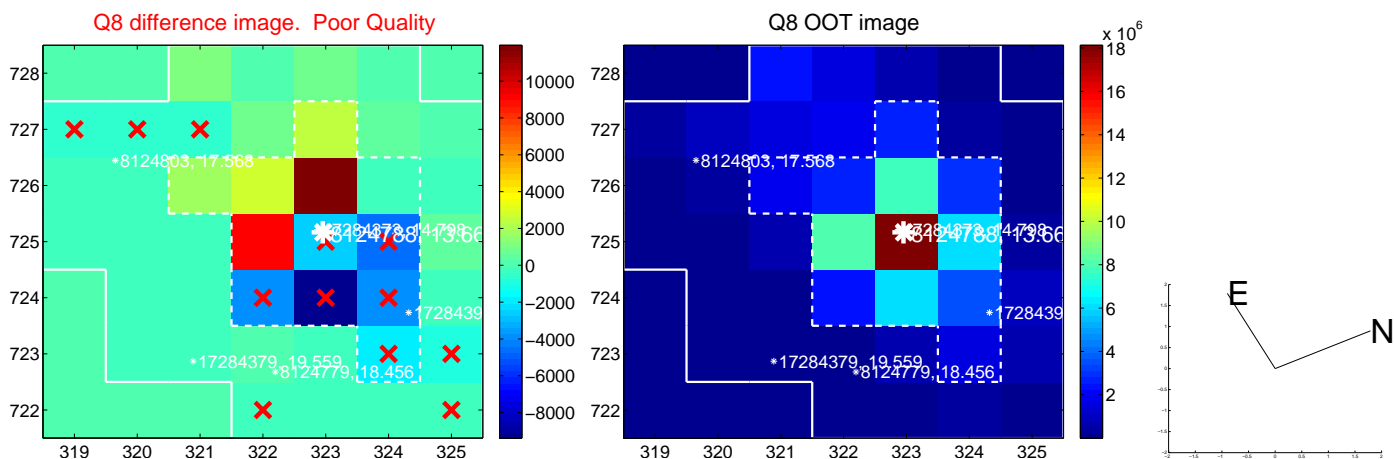
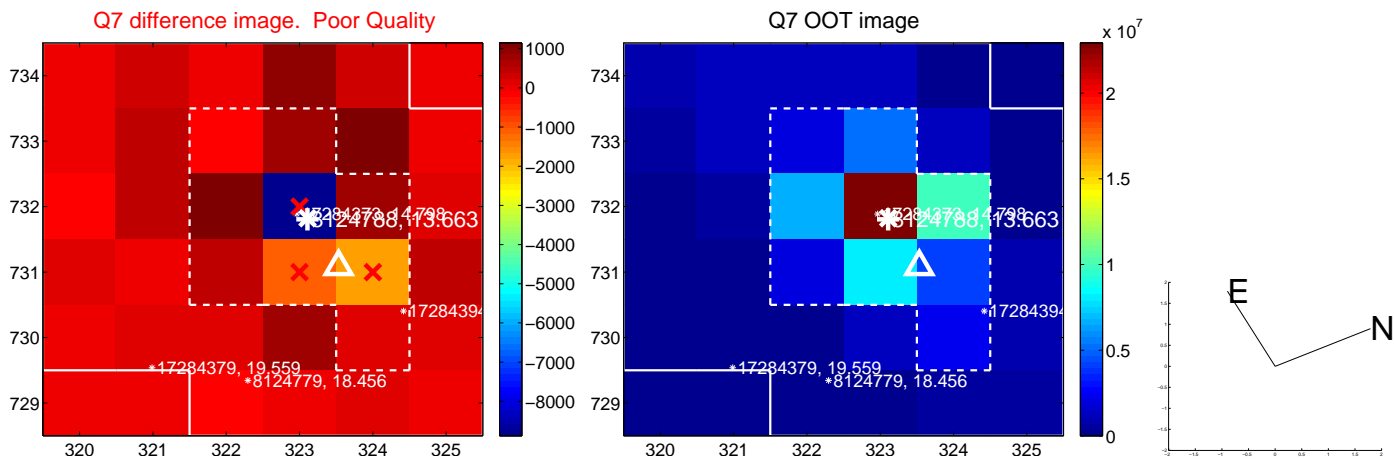
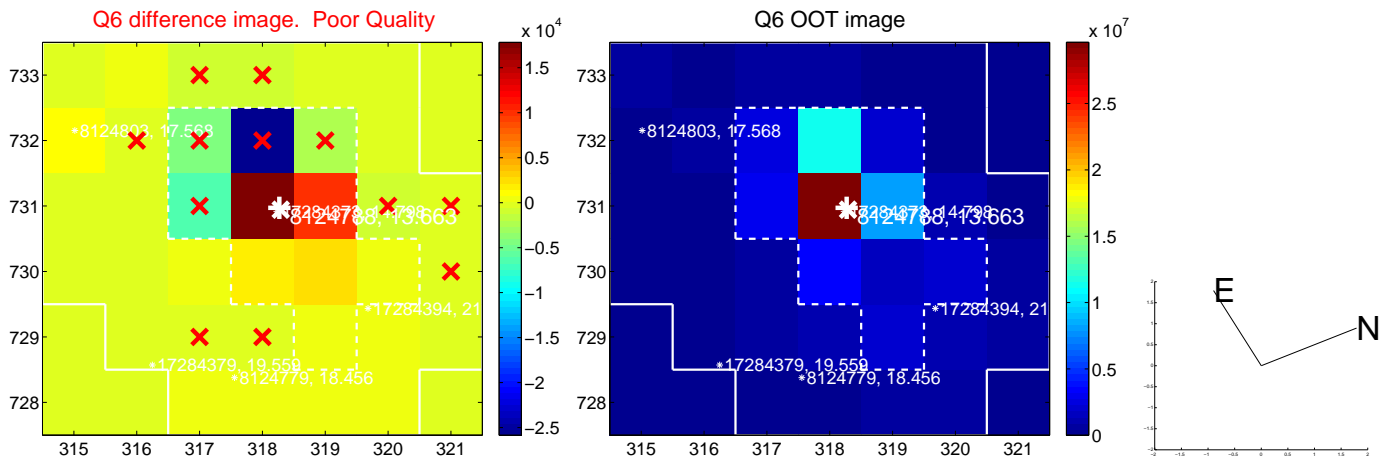
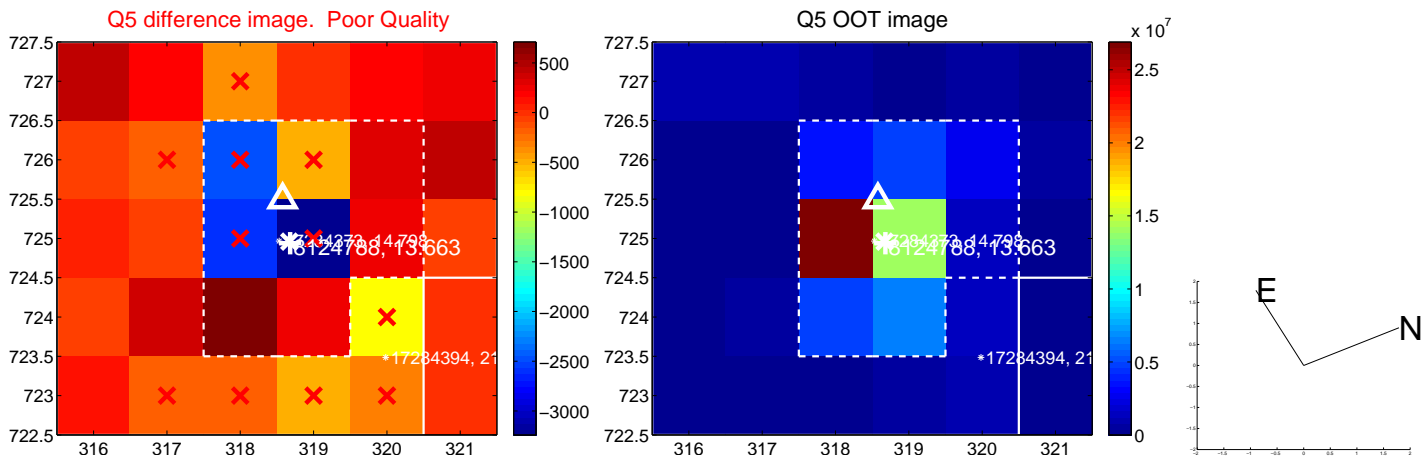


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

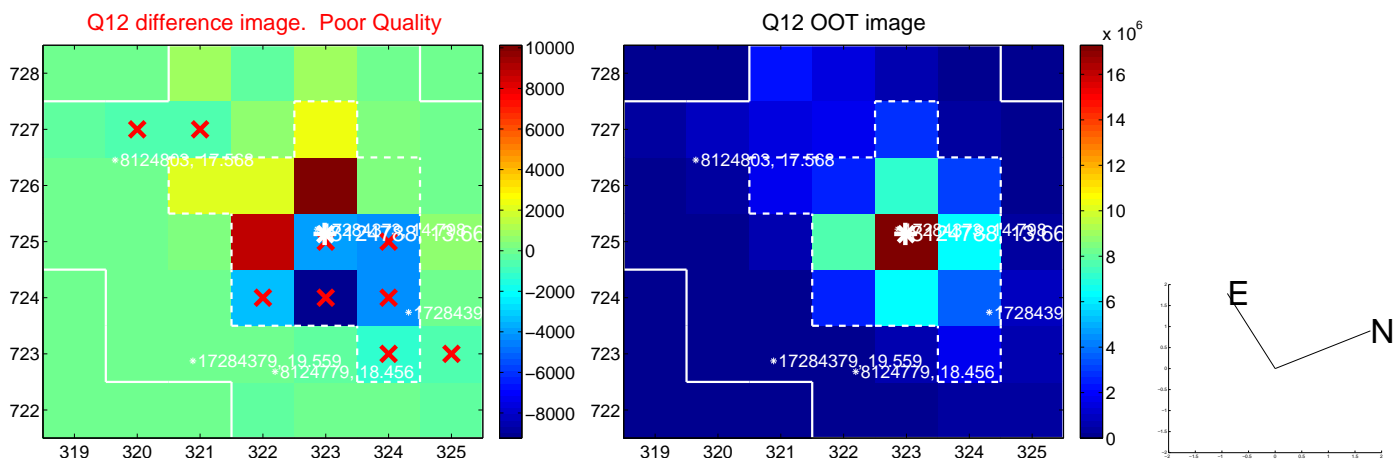
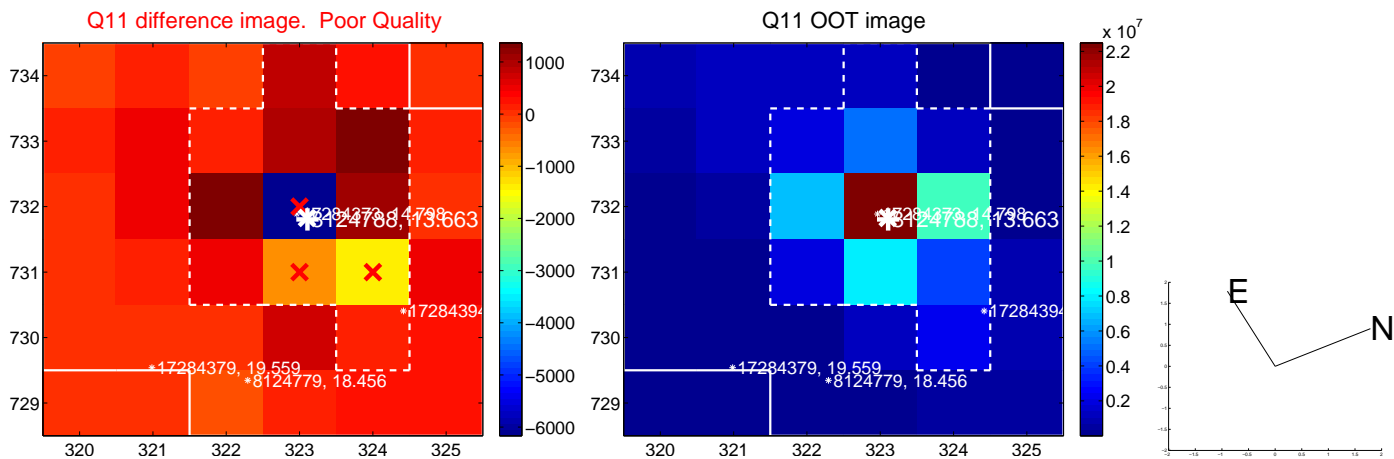
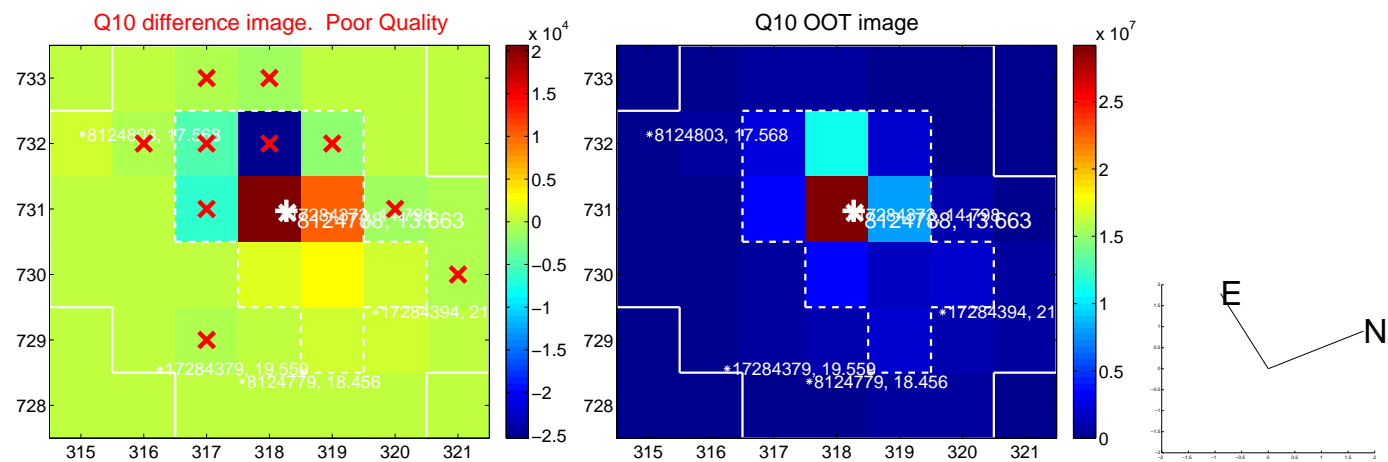
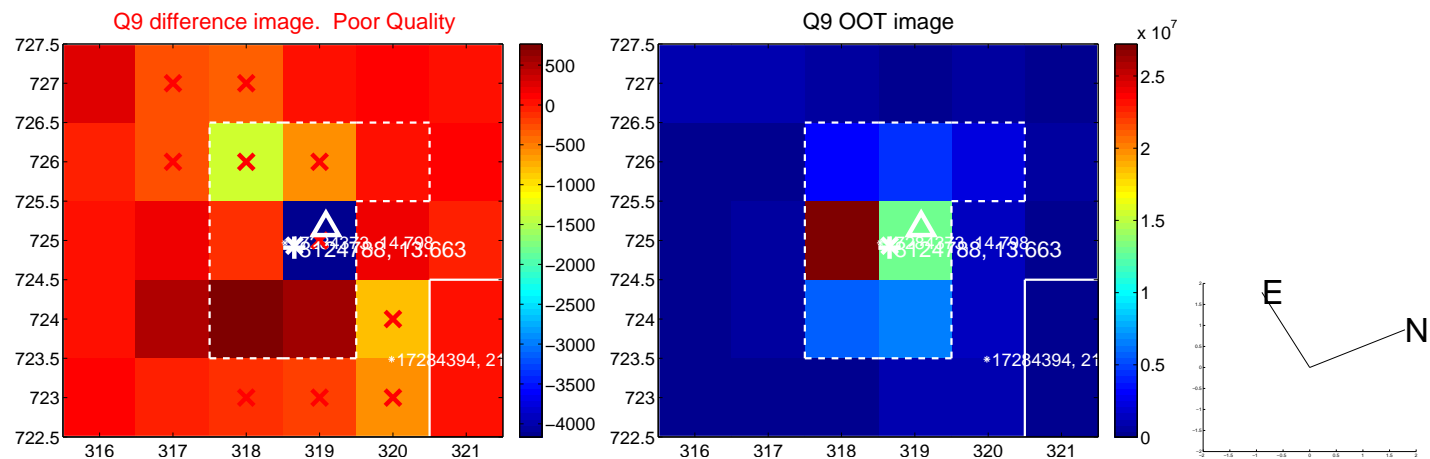
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



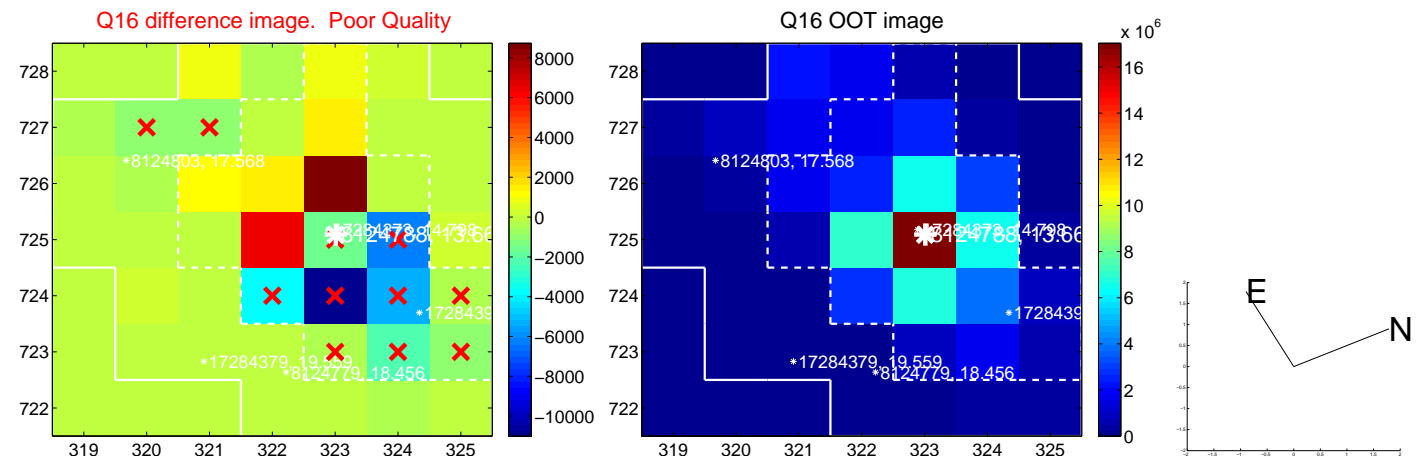
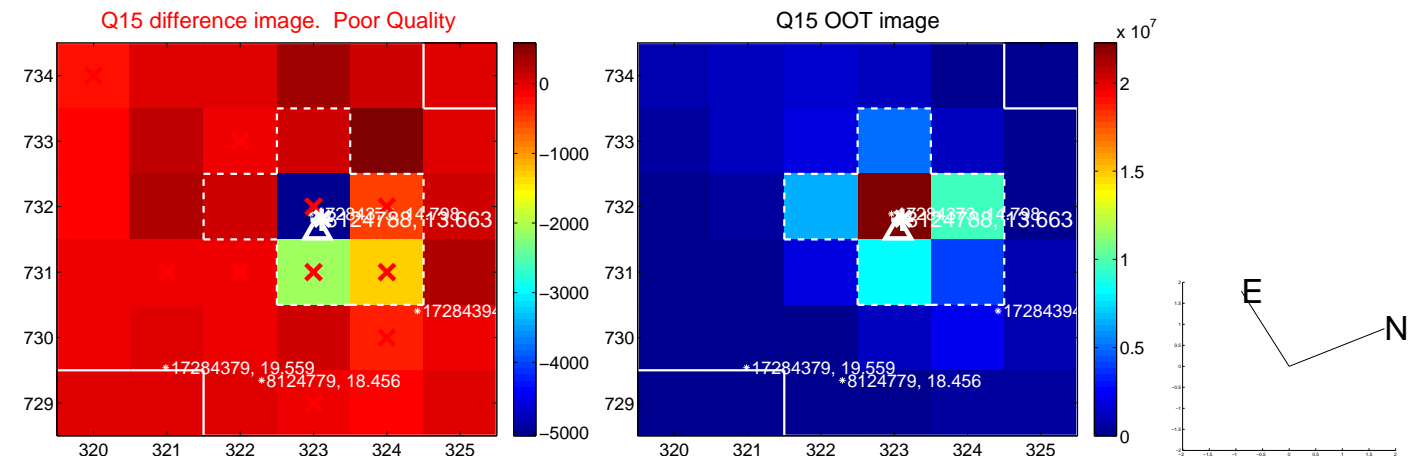
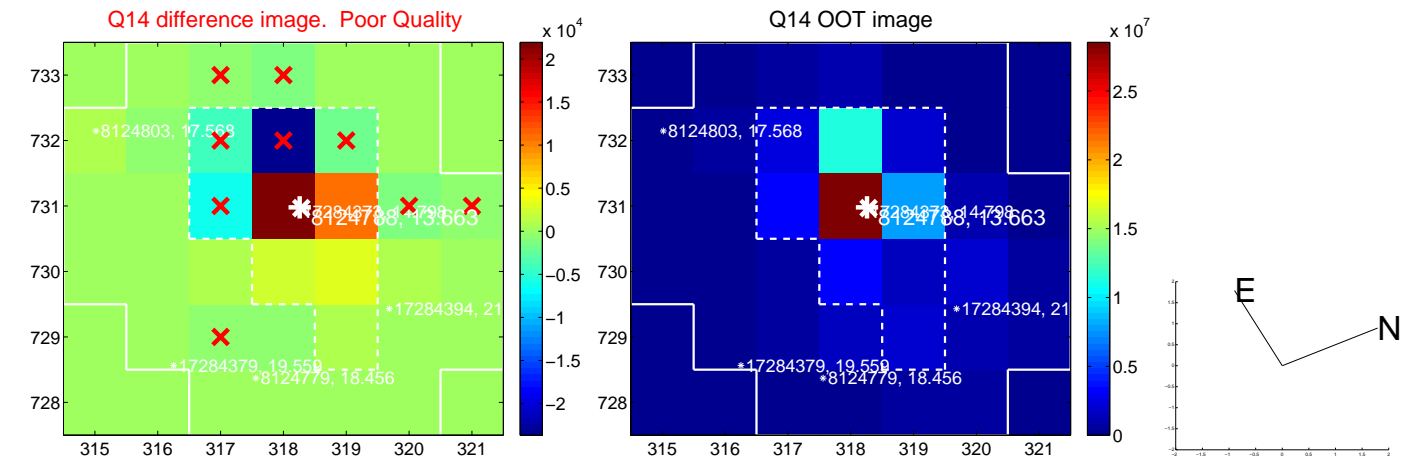
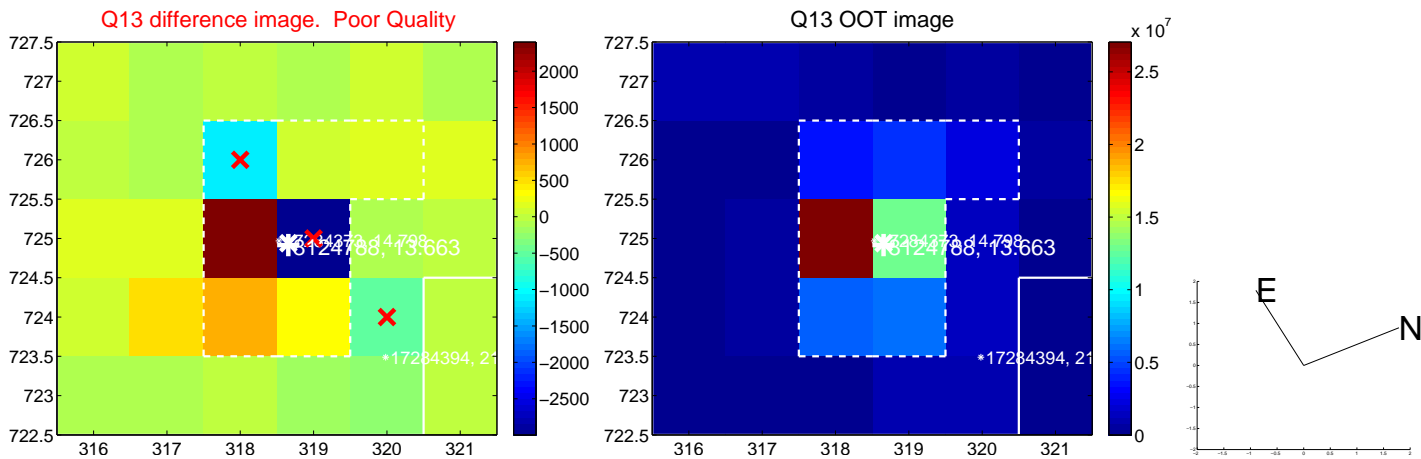
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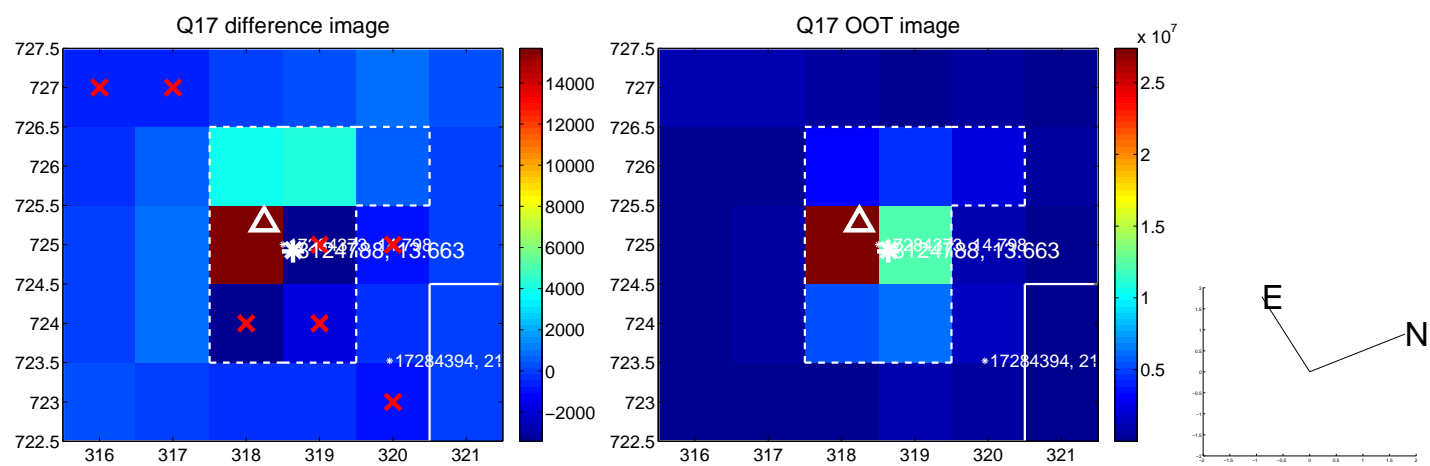
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folded centroid time series figure for this object.

UKIRT Image

Declination

